

REMARKS

The Final Office Action dated December 27, 2006 has been received and carefully noted. Claims 1-31 were examined. Claims 1-3, 5-11, 13-18 and 20-31 were rejected under 35 U.S.C. § 102(b) and claims 4, 12 and 19 were rejected under 35 U.S.C. § 103(a).

Claims 1, 9, 17 and 27 are amended. Claims 32-37 remain cancelled. Claims 1-31 remain pending in the application.

Reconsideration of the pending claims is respectfully requested in view of the amendments and following remarks.

I. Claims Rejected Under 35 U.S.C. § 102(b)

Claims 1-3, 5-11, 13-18 and 20-31 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Publication No. 2001/0008496 by Leung et al. (hereinafter "*Leung*"). A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *MPEP* § 2131. Applicants respectfully submit that each and every element in independent claims 1, 9, 17 and 27, as amended, is not set forth in the cited reference.

Independent claims 1, 9, 17 and 27 have been amended and now include the limitation of "the refresh logic to detect a pattern of activity on the first memory bus to identify a time to carry out the refresh operations." *Leung* describes a memory that must be periodically refreshed (*Abstract*). According to *Leung*, a memory controller includes a refresh manager that monitors the number of idle cycles on the system bus during a refresh period (*Leung, Page 1, Paragraph 10*). This refresh manager monitors the number of idle cycles on the system bus, and forces one or more idle cycles on the system bus if the monitored number of idle cycles is less than the predetermined number of idle cycle during the refresh period (*Page 1, Paragraph 10*). Thus, in *Leung*, the refresh manager relies only on the number of idle cycles to determine if it is necessary to add any further idle cycles. No other decision factor is used by the refresh manager to optimize the refresh operation. Thus, in contrast to claims 1, 9, 17 and 27, a refresh request according to *Leung* is determined not by monitoring the memory bus for patterns of *activity* on

the memory bus but by monitoring idle cycles (i.e. inactivity) for a time to carry out refresh operations.

Thus, *Leung* does not include each and every element of independent claims 1, 9, 17 and 27. Claims 2-8, 10-16, 18-26 and 28-31 include all of the limitations of their respective independent claims. Therefore, *Leung* does not anticipate these claims. Accordingly, Applicants respectfully submit that independent claims 1, 9, 17 and 27 and their respective dependent claims are patentable in view of *Leung*.

II. Claims rejected under 35 U.S.C. § 103(a)

Claims 4, 12 and 19 were rejected under 35 U.S.C. § 103(a) as obvious over *Leung* in view of U.S. Patent No. 6,925,086 issued to Curtis (hereinafter "*Curtis*"). To establish a *prima facie* case of obviousness: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference; (2) there must be a reasonable expectation of success; and (3) the references when combined must teach or suggest all of the claim limitations. *MPEP* § 2142. Applicants respectfully submit that a *prima facie* case of obviousness has not been established.

More particularly, the references when combined do not teach or suggest all of the claim limitations of dependent claims 4, 12 and 19. *Curtis* discloses a packet memory system. (*Abstract*). As discussed previously, independent claims 1, 9 and 17 include the limitation of "the refresh logic to detect a pattern of activity on the first memory bus to identify a time to carry out the refresh operations." Dependent claims 4, 12 and 19 depend from independent claims 1, 9 and 17, respectively.

For the reasons set forth above in regard to independent claims 1, 9 and 17, *Leung* does not teach the elements of claims 1, 9, and 17. *Curtis* does not cure these defects of *Leung*. Examiner has not relied upon and Applicants have been unable to discern any part of *Curtis* that discloses these elements of claims 1, 9 and 17. Thus, neither *Leung* nor *Curtis* includes the limitations set forth in independent claims 1, 9 and 17, which are limitations included in dependent claims 4, 12 and 19. Accordingly, Applicants respectfully submit that dependent claims 4, 12 and 19 are patentable over *Leung* in view of *Curtis*.

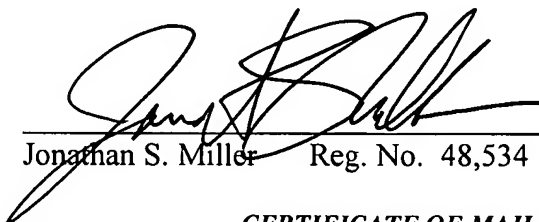
CONCLUSION

In view of the foregoing, it is believed that all claims now pending, namely claims 1- 31, patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207 3800.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

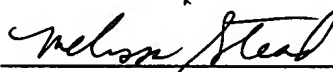
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Date